

## RAIL-TO-RAIL INPUT LINEAR VOLTAGE TO CURRENT CONVERTER

### ABSTRACT OF THE DISCLOSURE

A voltage-to-current converter circuit is disclosed. In one embodiment, the present invention includes a first metal oxide semiconductor field effect transistor (MOSFET) stage operable in a low to medium power range. The present invention also includes a second MOSFET stage operable in a medium to high power range. An additive circuit is utilized to add the contributions of both the first MOSFET stage and the second MOSFET stage. A subtractive circuit is further used to subtract either the first MOSFET stage or the second MOSFET stage when both the first MOSFET stage and the second MOSFET stage are operating in the medium power range and outputting current in a voltage-to-current converting circuit.